THE PENDING CLAIMS

1-5. (Canceled)

6. (Currently Amended) A method of protecting normal tissue against damage from radiation therapy while making cancer cells more susceptible to radiation, the method comprising:

orally administering to a mammalian subject afflicted with breast cancer and treated with radiation therapy an aqueous composition comprising a therapeutically effective amount of glutamine or a pharmaceutically acceptable salt thereof, and about 20-40 wt-% carbohydrate in an amount effective to increase the absorption of glutamine by the subject, wherein the composition protects the normal breast tissue or associated upper body tissue against damage from the radiation therapy, while making cancer cells more susceptible to radiation, so that the therapeutic index of the radiation therapy is increased ~~so that the subject can be treated with a higher dose of radiation and/or treated with radiation for a longer time~~.

7-9. (Canceled)

10. (Original) The method of claim 9 wherein the composition prevents increased breast density or lessens the severity of increased breast density.

11. (Previously Presented) The method of claim 6 wherein the composition prevents edema or lessens the severity of edema.

12. (Original) The method of claim 11 wherein the edema is of breast tissue.

13. (Previously Presented) The method of claim 6 wherein the tissue is skin.

14. (Previously Presented) The method of claim 6 wherein the composition protects the appearance of the tissue.

15-43. (Canceled)

44. (Previously Presented) The method of claim 6, wherein the amount of glutamine administered is at least 0.5 mg per day per kg body mass of the subject.

45. (Original) The method of claim 44 wherein the amount of glutamine administered is 0.2 g to 3.0 g per day per kg body mass of the subject.

46. (Previously Presented) The method of claim 6, wherein the amount of glutamine administered to the subject is less than 0.5 g per kg per day.

47. (Previously Presented) The method of claim 6, wherein the amount of glutamine administered to the subject is less than 0.1 g per kg per day.

48. (Previously Presented) The method of claim 6, wherein the carbohydrate comprises one or more monosaccharides or disaccharides.

49. (Previously Presented) The method of claim 6, wherein the carbohydrate comprises a sugar alcohol.

50. (Previously Presented) The method of claim 6, wherein the weight ratio of total carbohydrate to glutamine in the composition is 0.5:1 to 50:1.

51. (Previously Presented) The method of claim 6, wherein the weight ratio of total carbohydrate to glutamine is at least 4:1 in an aqueous solution, either after preparation with an aqueous solvent or after delivery in an aqueous environment of the mammalian subject.

52. (Previously Presented) The method of claim 6, wherein the composition comprises no more than 5 naturally occurring amino acids other than glutamine.

53. (Original) The method of claim 52 wherein the composition comprises no naturally occurring amino acids other than glutamine.

54. (Canceled)

55. (Previously Presented) The method of claim 6, wherein the mammalian subject is a human.

56. (Previously Presented) The method of claim 6, wherein the composition is administered after or while administering radiation therapy to the subject.

57-58. (Canceled)